

STATE OF MISSOURI
FISCAL YEAR 2006
ANNUAL RECYCLING REPORT



Prepared By:
State of Missouri, Office of Administration

Acknowledgements

Published by the State of Missouri, Office of Administration, Division of Purchasing and Materials Management in consultation with the Department of Natural Resources' Solid Waste Management Program and the Environmental Improvement and Energy Resources Authority.

Special thanks to the Missouri Interagency Recycling Committee (MIRC), department recycling coordinators and purchasing staff who contributed to this report. The Missouri State Recycling Program also wants to thank all state employees for their ongoing efforts to reduce, reuse, recycle, and buy recycled-content products.

*State of Missouri
Office of Administration
Division of Purchasing and Materials Management
301 W. High Street, P.O. Box 809
Jefferson City, MO 65102-0809
www.oa.mo.gov/purch/purch.htm*

Questions, comments or suggestions regarding this report or the State Recycling Program may be directed to the State Recycling Coordinator.

*Robert Didriksen
PH: 573/751-3384
FAX: 573/526-9815
E-mail: Robert.Didriksen@oa.mo.gov*





State of Missouri
OFFICE OF ADMINISTRATION

Post Office Box 809
Jefferson City
65102
(573) 751-1851

Matt Blunt
Governor

Michael Keathley
Commissioner

To the Members of the General Assembly of the State of Missouri,

In accordance with RSMo 34.031, the Office of Administration in consultation with the Department of Natural Resources is submitting the Fiscal Year 2006 (FY06) Annual Recycling Report to summarize state government's accomplishments in the areas of recycling, waste reduction, and recycled content procurement for the period of July 1, 2005 through June 30, 2006.

State law directs state agencies to implement policies for recycling, waste reduction, and procurement of recycled content products. The State Recycling Program, administered by the Office of Administration, Division of Purchasing and Materials Management, is responsible for assisting state agencies in these areas. The State Recycling Coordinator works cooperatively with the Missouri Interagency Recycling Committee (MIRC) to facilitate recycling and waste reduction by state employees.

The Office of Administration is pleased to report that revenues from the collection of recyclable materials in FY06 nearly matched the record proceeds realized in FY05 (see chart on p. 18). State government recycling efforts continue to reduce the amount of waste generated at state facilities and the related costs of waste disposal. On pages 11 – 14 of this year's report the achievements of several agencies in the area of recycling and waste reduction are summarized.

We appreciate the support of the General Assembly in our recycling efforts.

Sincerely,

A blue ink signature of Richard M. AuBuchon, written in a cursive style.

Richard M. AuBuchon
Assistant Commissioner of Administration

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I. Missouri State Recycling Program Structure

What is the Missouri State Recycling Program?

The Missouri State Recycling Program (**MSRP**) was established in 1989 when legislation added sections 34.031 and 34.032 to Chapter 34 of the MO Revised Statutes. The purpose of the **MSRP** is to assist State of Missouri government agencies with:

- **Procurement** of products manufactured with recycled materials.
- Coordinating **waste reduction** strategies.
- Overseeing the **collection** of recyclables by establishing recycling services contracts.

Who is the MSRP?

There are three components to the **MSRP's** organizational chart.

The **state recycling coordinator** is dedicated to the planning and administration of recycling and waste reduction activities.

The **Missouri Interagency Recycling Committee** serves an important purpose by providing input on recycling initiatives and communicating with state employees about various recycling programs.

The efforts of **state employees** to recycle ensures the success of any recycling initiative. State employees that recycle are considered a part of the **MSRP**.



What is the Missouri Interagency Recycling Committee?

The Missouri Interagency Recycling Committee (**MIRC**) was established in 1994. It was recognized the **MSRP** needed a way to communicate procurement and recycling policies throughout state government. **MIRC** is a vital component of the **MSRP** and meets quarterly to discuss issues dealing with recycling collection, waste reduction, recycling market conditions and recycled product procurement.

Who is MIRC?

The Recycling Committee is composed of representatives from various state departments (executive, judicial, and legislative). To learn more about recycling in your department, please contact your **MIRC** member. A list of members is located on page 6.

Missouri Interagency Recycling Committee (MIRC)

Members

Executive Departments	MIRC Member	Phone	Email
Office of Administration Div. of Purch. & Materials Mgmt. State Recycling Program HST, Room 630/P.O. Box 809 Jefferson City, MO 65102	Rob Didriksen State Recycling Coordinator	573.751.3384	Robert.Didriksen@oa.mo.gov
Office of Administration	Vernon Morris	573.526.1136	Vernon.Morris@oa.mo.gov
	Glenda Vanderfeltz	573.751.0494	Glenda.Vanderfeltz@oa.mo.gov
Dept. of Agriculture	Alan Clements	573.751.6639	Alan.Clements@mda.mo.gov
	Joan Whittle	573.751.5637	Joan.Whittle@mda.mo.gov
	Karen Wood	573.751.5631	Karen.Wood@mda.mo.gov
Dept. of Conservation	James Aslakson	573.522.4115	James.Aslakson@mdc.mo.gov
Dept. of Corrections	Judy Crocker	573.526.6424	Judy.Crocker@doc.mo.gov
Dept. of Economic Development	Ron Doerhoff	573.751.3959	Ron.Doerhoff@psc.mo.gov
	Linda Hartman	573.751.2048	Linda.Hartman@ded.mo.gov
	Joe Herigon	573.526.8247	Joe.Herigon@ded.mo.gov
Dept. of Elem. & Sec. Education	Rachel Dietzel	573.751.4463	Rachel.Dietzel@dese.mo.gov
	Janet Fitzwater	573.751.3501	Janet.Fitzwater@dese.mo.gov
Dept. of Health & Senior Services	Debbie Klindt	573.751.6395	Debbie.Klindt@dhss.mo.gov
Dept. of Higher Education	Leroy Wade	573.751.2361	Leroy.Wade@dhe.mo.gov
Dept. of Insurance	Shirley Gerling	573.751.1942	Shirley.gerling@insurance.mo.gov
Division of Professional Registration	Sandy Sebastian	573.526.3557	Sandy.Sebastian@pr.mo.gov
Dept. of Labor & Ind. Relations	David Asel	573.751.5992	David.Asel@dolir.mo.gov
Dept. of Mental Health	Mike Haake	573.751.4079	Mike.Haake@dmh.mo.gov
Dept. of Natural Resources	Dennis Hansen	573.526.3937	Dennis.Hansen@dnr.mo.gov
	Katy D'Agostino	573.526.3944	Katy.D'Agostino@dnr.mo.gov
DNR -- EI ERA	Kristin Allan	573.751.4919	Kristin.Allan@dnr.mo.gov
Dept. of Public Safety	Rhonda Fogelbach	573.751.5103	Rhonda.Fogelbach@dps.mo.gov
	Deb Goodman	573.638.9500	Debra.Goodman@mo.ngb.army.mil
Dept. of Revenue	Becky Imhoff	573.751.7429	Becky.Imhoff@dor.mo.gov
Dept. of Social Services	John Giles	573.751.3870	John.J.Giles@dss.mo.gov
	Marcus Monroe	573.751.3870	Marcus.A.Monroe@dss.mo.gov
Dept. of Transportation	Kevin Wideman	573.526.4171	Kevin.Wideman@modot.mo.gov
Elected Officials			
Office of the Attorney General	Doug Nelson	573.751.3321	Doug.Nelson@ago.mo.gov
	Tracy Haslag	573.751.2909	Tracy.Haslag@ago.mo.gov
Office of the Secretary of State	Michael Shellman	573.751.2397	Michael.Shellman@sos.mo.gov
Office of the State Treasurer	Nancy Tennison	573.751.0912	Nancy.Tennison@treasurer.mo.gov
Judicial Branch			
Supreme Court	Don Dickey	573.751.7311	ddickey@osca.state.mo.us
	Lisa Hentges	573.751.7334	lhentges@osca.state.mo.us
Legislative Branch			
House of Representatives	Brad Werner	573.751.4555	Brad.Werner@house.mo.gov

II. FY06 Overview: Collection of Recyclables

Local Recycling Services Contracts

In FY06, the Missouri State Recycling Program (**MSRP**) provided contract administration for three local recycling services contracts. Areas covered by these contracts included Jefferson City, Kansas City, and Springfield. These contracts provided state agencies an option to recycle office paper and cardboard at no cost.

Jefferson City

As the center of state government and having the highest concentration of state employees, state agencies in Jefferson City generated significant amounts of recyclable materials in FY06. The Jefferson City Recycling Services contract offered state agencies an opportunity to recycle mixed office paper, cardboard, and aluminum. The charts to the right show the amount recycled for each of these materials.

The MSRP continued to build the cardboard collection infrastructure in Jefferson City by investing in additional containers. Nineteen small carts and seven large containers were purchased from Surplus Property and placed in several state office buildings. The small carts were placed on each floor of the Jefferson and Truman buildings to allow for more convenient access to cardboard recycling for tenants. The large containers were placed on the docks of the Truman, Jefferson, Broadway, and Employment Security buildings. These containers function as a central collection point for cardboard collected from each of these buildings.

In addition several wheeled containers were distributed to smaller offices occupied by the Department of Public Safety's Divisions of Fire Safety and Water Patrol, Department of Revenue, and Department of Elementary & Secondary Education's Division of Vocational Rehabilitation.

These investments to improve cardboard collection resulted in a **32%** increase in cardboard collected in FY06 as compared to FY05 (see chart to the right).

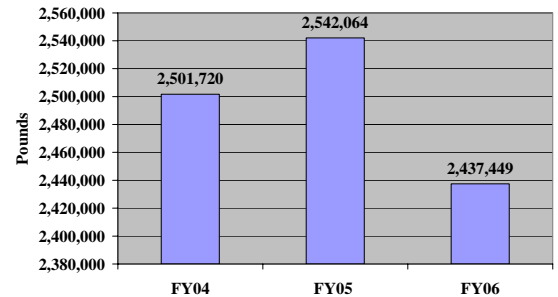
Kansas City

State agencies in Kansas City made tremendous advances in the amount of material collected for recycling in FY06 as compared to FY05. The amount of mixed office paper collected increased **81%** while cardboard recycled in FY06 increased **20%** (see charts to the right). Revenue generated from the collection of recyclables in Kansas City increased **84%** in FY06 (\$2392) as compared to FY05 (\$1292).

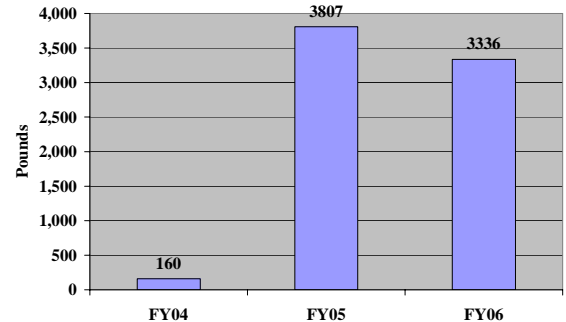
Springfield

Collection of mixed office paper and cardboard by state agencies in the Springfield area showed a decline in FY06 as compared to FY05. (see charts to the right)

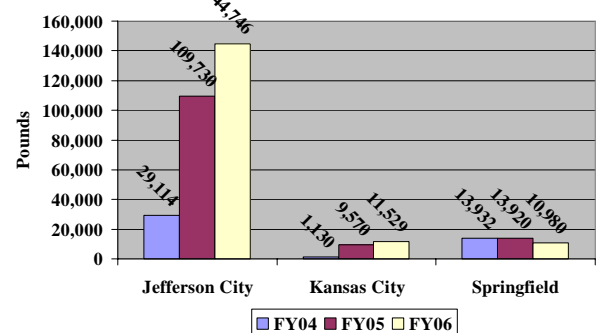
FY04 - FY06 Comparison of Paper Recycled by Agencies in Jefferson City



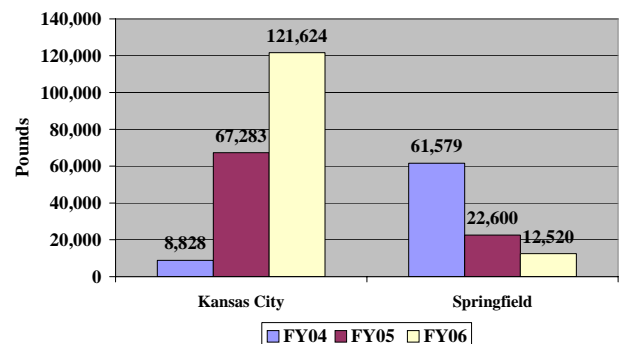
FY04 - FY06 Aluminum Collected by Jefferson City Contract



FY04 - FY06 Comparison of Cardboard Recycled by Agencies Covered by Local Contract



FY04 - FY06 Comparison of Paper Recycled by Agencies in Kansas City & Springfield

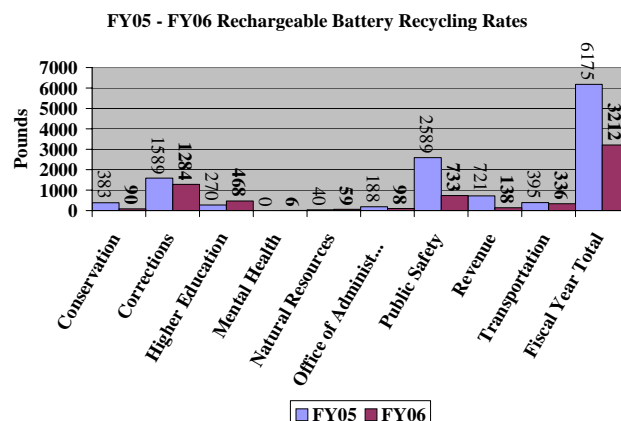


Statewide Recycling Services

The Missouri State Recycling Program (MSRP) coordinated two no-cost statewide recycling services for state agencies in FY06. These convenient services allowed state employees to recycle inkjet cartridges or rechargeable batteries from work or home. In addition, the Office of Administration's Division of Purchasing and Materials Management administered two fee-based services for document destruction and lamp recycling.

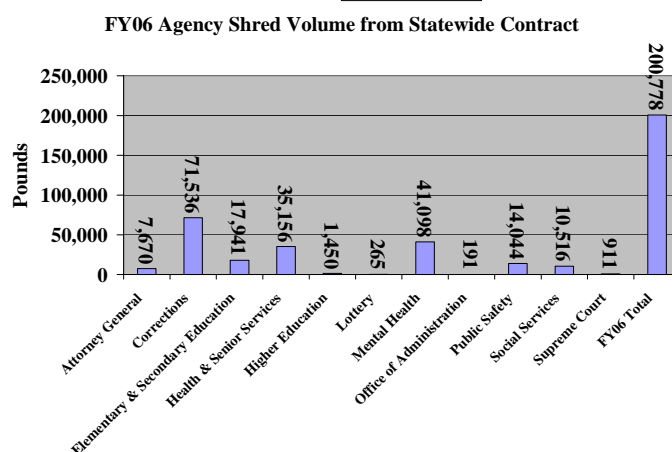
Rechargeable Battery Recycling

There was a significant decrease in the number of pounds of rechargeable batteries collected in FY06 as compared to FY05. This is likely attributable to the fact that FY05 marked the first full year that this recycling service was available to state agencies and at least one of these agencies recycled a backlog of batteries in the first year. The MO State Highway Patrol (part of the Dept. of Public Safety) had accumulated several 55-gallon drums of batteries that were recycled in FY05. The number of locations registered to recycle rechargeable batteries increased by twelve in FY06 bringing the total number of registered sites to sixty-eight statewide.



Shredding & Records Disposal Contract

This contract provided state agencies throughout Missouri an opportunity to have confidential documents destroyed for a fee. Cost varied depending on volume to be destroyed and/or location of state agency. The chart to the right shows how many pounds were shredded by agencies utilizing this contract in FY06. State agencies are not required to use this contract so information reported here only represents a portion of the state's overall volume of records shredded.

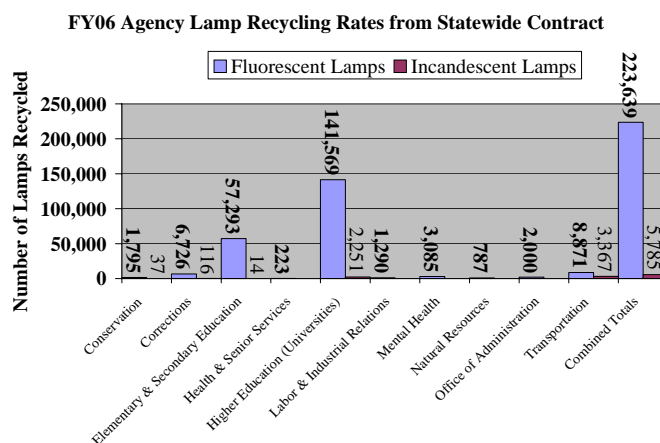


Lamp & Ballast Recycling Contract

This contract provided a way for agencies to recycle both fluorescent and incandescent lighting as well as related lighting equipment (i.e., ballasts). Agencies were also able to recycle non-rechargeable batteries through this contract.

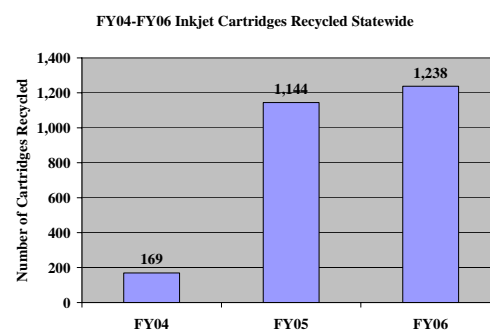
All agencies utilizing the lamp recycling contract in FY06 showed an increase in the number of fluorescent lamps recycled when compared to FY05. The largest increase occurred with state colleges and universities (reported under the Department of Higher Education) where the number of lamps recycled increased **183%**.

Figures reported (see chart to right) under the Department of Elementary & Secondary Education (DESE) actually reflect the number of lamps recycled by various public school districts in Missouri.



Inkjet Cartridge Recycling

Inkjet cartridges recycled by state agencies in FY06 showed a slight increase of **8%**. This increase is likely a result of improved accessibility to inkjet cartridge recycling for state employees that resulted when the self-service recycling station was introduced in November, 2005 (see p.13 for additional information). In addition, over 1500 postage paid inkjet cartridge mailers were distributed to state agencies in FY06. Inkjet cartridges recycled by state employees in FY06 generated \$611 of revenue that was deposited into the State Recycling Fund.



FY06 Department Reports of Materials Recycled

Number of Pounds Recycled	Attorney General	Supreme Court	Agriculture	Conservation	Corrections	Economic Development	Elementary & Secondary Education	Health & Senior Services	Higher Education	Insurance	Labor & Industrial Relations	Mental Health	Natural Resources	Office of Administration	Public Safety	Revenue	Social Services	Transportation	Totals by Material
Aluminum		310	A	840	41,515	A	A	A	70	A		950	2,072	107	A	A	500	A	49,700
Ballasts				1,628	614		1,772		32,607		485	1,038						706	38,850
Batteries-Non Recharge					6,749		112		2,106				66		602	1		84	9,720
Batteries-Recharge				90	1,607				256			13	55	52	992	9		332	3,406
Batteries-Lead Acid			1,379	30	11,681	A	602		5,434			5,233	4	46	2,661	129		166,869	194,068
Cardboard	A		A	4,200	1,252,652	A	A	A		A	A	171,040	3,872	12,384	1,100	A	A		1,612,503
Electronic Scrap							1,774						1,033					13	2,820
Food-Yard Waste			400,000		2,008,959							500	3,000		800				2,413,259
Glass													335						335
Magazines & Catalogs				350								6,812	128		500		115		7,905
Media, Storage					2,376								68	12,598	65	35		320	15,462
Mixed Office Paper	7,670	102,411	A	27,200	251,547	900	17,941	35,156	1,450	A	137,372	140,503	33,148	191	14,894	661,085	67,874	A	4,076,044
Newsprint		4,900		382	2,256							55,160	947		250		310		64,205
Plastic				250	47,819							400	1,314	120			20		50,043
Rubber, Scrap Tires			3,150	588	2,737							6,218			1,050			198,328	7,295,929
Scrap Metal			15,000	1,050	241,061									41	77,036			258,000	592,188
Styrofoam				5									7	25					37
Telephone Books		168		152						160		1,826	25	30	741		3,000		6,102
Textiles					32,000														32,000
Tin / Steel Cans				3	331,670							8,500	180		6				340,359
Totals by Agency	7,670	107,789	419,529	36,768	4,235,243	900	22,201	35,156	41,923	160	137,857	398,193	46,254	25,594	100,697	661,379	71,819	624,652	

Note on Boxes with A's: An "A" in a box on this table indicates that an agency recycled the designated item by utilizing the Jefferson City recycling services contract. See additional explanation at top of p. 10.

Note on DHE & DESE: Figures appearing in the DHE column for ballasts and batteries (non-rechargeable, rechargeable, lead-acid) are the results of numerous state college and university recycling efforts. Figures appearing in the DESE column for ballasts, batteries (non-rechargeable, lead acid), and electronic scrap are entirely attributable to various public school districts.

Note on Totals by Material: In addition to agency reported figures, the following aggregate figures reported by contract and other centralized sources of data have been added to "totals by material".

Aluminum (JC contract) = 3336 lbs.; Cardboard (JC/KC/Spfld contract) = 163,100 lbs.; Mixed Office Paper (JC/KC/Spfld contract) = 2,576,702 lbs.; Rubber, Scrap Tires (MVE) = 7,508,000 lbs.

Note on "Rubber, Scrap Tire" total: This figure was calculated by subtracting the pounds of tires recycled by state agencies from the total number of tires recycled by MVE. The total number of tires recycled by MVE not only reflects tires recycled by state agencies, but also other tax-supported entities.

Misc. Notes: 265 lbs. of the mixed office paper total for Dept. of Revenue is credited to the Lottery for document destruction. 20 lbs. of the media total for Office of Administration is attributable to the House of Representatives.

FY06 Department Reports of Materials Recycled (cont.)

Contractual Reporting / Background Information for Table on Page 9

Total pounds recycled by agencies utilizing the Jefferson City, Kansas City, and Springfield recycling services contracts is summarized in the table to the right. These figures are reported as cumulative totals due to contract reporting. Data is reported by building and it is not feasible to break out data by agency where there are multiple agencies in the same building.

FY06 Recycling Contract Totals

	Paper	Cardboard	Aluminum
Jefferson City	2,437,449	144,746	3,336
Kansas City	121,624	11,529	n/a
Springfield	12,520	10,980	n/a

Agencies that do not appear on the table on p. 9, but used a recycling service contract to recycle aluminum, cardboard, and mixed office paper include — **House of Representatives, Senate, Treasurer's Office, and the Secretary of State.**

Number of Items and Gallons Recycled Table

Number of Items Recycled	Books-Bound Publications	Cell Phones	Fluorescent Lamps	Incandescent Lamps	Inkjet & Toner Cartridges	Fuel/Oil Filters	Pallets	Tyvek Envelopes	Number of Gallons Recycled					
									Antifreeze	Diesel Fuel	Gasoline	Oil, Motor	Oil, Used Cooking	Paint/Solvents
Attorney General					174									
Auditor's Office					33									
Elementary & Secondary Education			57,293	14	9									
Agriculture					7	75						250	800	
Conservation	50	2	1,795	37	10	150			20			1,800		65
Corrections		29	8,226	116	2,232	307	2,254		315			2,250	3,616	170
Economic Development					80									
Treasurer's Office					107									
Health & Senior Services			223		143									
Higher Education		1	141,569	2,251										
Insurance					10									
Labor & Industrial Relations			1,290											
Mental Health		10	4,690		741		474		120			1,149	796	54
Natural Resources		2	1,203		60			500				120		
Office of Administration			2,000		17		832							
Public Safety			8,025		355	20	1,075		273	337	157	15,950	517	15
Social Services	110				2,819		600							
Transportation			8,871	3,367	1,440	1,350	1,560		420	1,500	220	7,500		355
TOTALS	160	44	235,185	5,785	9,475	1,902	6,795	500	1,148	1,837	377	29,019	5,729	659

Note on DESE & DHE Figures: Figures appearing in the fluorescent and incandescent lamp columns for DESE and DHE are attributable to various public school districts (DESE) and state colleges and universities (DHE).

II. FY06 Overview: State Agency Waste Reduction / Recycling Accomplishments

Lewis & Clark State Office Building Earns LEED Platinum Certification

In May, 2006, the Lewis and Clark State Office Building, home to the Missouri Department of Natural Resources, was awarded the highest rating available by the U.S. Green Building Council for energy efficiency and environmental awareness. The building earned a Leadership in Energy and Environmental Design (LEED) Platinum certification. At the time it was only one of 16 in the nation and the first ever to be awarded to a state government office building. Criteria for LEED certification include — site selection and development; water and energy use; environmentally preferred construction products, waste stream management; indoor environmental quality; and innovation in sustainable design and construction.



State Agencies Save Paper with Electronic Payroll Stuffers

In FY06 the Office of Administration implemented a “paperless” payroll stuffer policy. Numerous state agencies utilize payroll stuffers to communicate programs and events to state employees. Prior to the “paperless” policy, a state agency would print up to 68,000 flyers for each message. In FY06 thirty-two “stuffers” were distributed which translates into 2,176,000 pieces of paper saved. The average cost to print a “stuffer” was \$1,250 resulting in an estimated annual savings of \$40,000.

Conservation Department Implements Monofilament Recycling Program

In FY06 the Missouri Department of Conservation (MDC) implemented a Monofilament Recovery and Recycling program. This program offers anglers an opportunity to help address fishing line litter at lakes and streams around Missouri. MDC facilitates this program by providing collection bins. The collection bins are installed and monitored by Stream Team volunteers. The volunteers clean and ship used fishing line to a company in Iowa that recycles the line to create artificial fish habitat structures.

Volunteerism is Alive and Well at the Missouri Department of Natural Resources

The Missouri Department of Natural Resources employees in Jefferson City offices have put in extra effort to maximize waste diversion through composting and recycling of materials not covered by state contracts. With the assistance of well over 60 employees, food waste is taken daily to enclosed compost bins outside the buildings. The DNR building located at 1738 E. Elm Street, the composting project has successfully been running for over seven years with about 2,000 pounds of food waste per year diverted from the landfill. Gradually, volunteers have beautified the composting area by removing invasive weeds, planting native species, and adding educational signage. Twice a year, staff move the compost from the bins into a finishing area to complete the composting process. Bags of the finished compost are raffled to the volunteers. Composting at the Lewis and Clark State Office Building began last year and diversion data is still being collected. At this point, volunteers estimate they are taking 3 to 4 buckets of food waste out of the building each week.

At both locations, volunteers collect #1 and #2 plastic containers, taking them to a local recycling center. The employees at Elm Street also recycle glass and steel food cans. Foam packing materials are collected for reuse by employees or taken to a local mail service. Christmas cards, decorative calendars, CDs, plastic six-pack holders and other materials are collected for use as craft materials for schools and special events like Earth Day.

State Recycling Program Receives Regional Community Recycling Leadership Award

The Rechargeable Battery Recycling Corporation (RBRC), a nonprofit public service organization dedicated to recycling rechargeable batteries and cell phones, recognized the Office of Administration, Missouri State Recycling Program (**MSRP**), with the 2005 “Regional Community Recycling Leadership Award” for the entire South Central region. Following is an excerpt from the nomination.

“Since joining the RBRC program in 2004, the Missouri State Recycling Program (MSRP) has implemented a successful statewide enrollment program with over 50 collection locations and the participation of a dozen different state agencies. MSRP has promoted the RBRC partnership through its Missouri Interagency Recycling Committee (MIRC), which has resulted in expanded participation due to effective information flow on the Call2Recycle™ program between agency coordinators, facility managers and regional staff. In 2005, MSRP’s efforts resulted in the collection of over 5,700 pounds of rechargeable batteries and cell phones.”

The MSRP credits the MO State Highway Patrol (MSHP) with providing the inspiration to pursue a rechargeable battery recycling service. In FY04 the MSHP warehouse contacted the MSRP to determine how to recycle a large quantity of rechargeable batteries. Research revealed a no-cost nationwide service offered by RBRC. Shortly after making the inquiry about rechargeable batteries, the MSHP had a system in place to recycle rechargeable batteries. Over the past two years the number of state agency locations registered with RBRC has grown to sixty-eight sites.

Department of Labor & Industrial Relations Saves Money with Recycling Innovation

The Department of Labor & Industrial Relations’ Division of Employment Security (DOLIR/DES) implemented a pilot project in August, 2005 to determine the feasibility of integrating recycling and shredding services into a single service.

The premise for this project was that combining recycling and shredding services into a single service would be mutually beneficial for the state and the company providing the service. It was thought that the state would benefit by decreasing labor costs and making document destruction simpler and more convenient for employees. The vendor would benefit from better separation of paper grades (lower labor costs for sorting) and would shred a larger volume. It was also believed that larger shred volumes would permit the vendor to charge a lower price for on-site document destruction and; in turn, allow the state to decrease its expense for document destruction.

Prior to implementing the pilot service, recycling and shredding were two separate processes where DOLIR/DES employees shredded confidential documents and the recycling contractor collected non-shredded paper and bags of shred. The pilot program implemented a system where most employees separate paper into two containers – all white paper (confidential & non-confidential) in one and all other types of paper (non-white, non-confidential paper) in the other. In two of the eighteen work areas taking part in the pilot there was a third container placed for colored confidential paper.

The pilot was very successful. Integration of recycling and shredding services into a single service was well received by employees at the Employment Security building. The pilot project allowed DOLIR/DES to secure a contract for on-site document destruction for 6-cents per pound. This represents nearly a **50%** discount to the statewide contract rate of 10-cents per pound.

Why are there so many paper recycling containers in our building?

The extra containers are a result of a pilot project being conducted by the Dept. of Labor, MO State Recycling Program, and MRS Recycling. The purpose of the pilot project is to determine the feasibility of combining recycling & shredding into one service.

Doesn't the pilot project make paper recycling and shredding more complicated?
By combining recycling and shredding services together, all paper waste can be taken to the same location to be recycled or shredded. Employees should benefit from a simpler, more convenient system for recycling and shredding.

Doesn't having more containers make recycling more time consuming?
Although having twice as many containers for recycling paper may seem more complicated and labor-intensive, the pilot project will actually eliminate the need for state employees to shred confidential documents.

Why is non-confidential white paper being shredded along with white confidential documents?
By combining all white paper into the same container, the recycling service is able to spend less time having to sort white paper from other grades of paper.

Look for the Color Coded Signs

WHITE: White Confidential & White Non-Confidential (SHRED)
BLUE: Colored Confidential Documents (SHRED)

NOTE – There are only 2 locations for colored confidential documents:
1st Floor – Near I.S. 2nd Floor – Benefits Files

YELLOW: All Other Types of Paper

DOLIR Pilot Project Promotional Poster

Missouri State Fair Manages Organic Waste

During the annual Missouri State Fair, approximately 3,000 cattle, 2,300 equine, 3,200 swine, 3,500 sheep, 1,300 goats, 2,230 assorted poultry, 2,100 rabbits and 53 Llamas compete for bragging rights as the best of the best in Missouri Agriculture. Throughout the eleven days of the 2005 event 6,000 cubic yards (approximately 200 tons) of straw and manure were removed from the fair's barns and livestock areas. Private promoters and associations have also discovered the Missouri State Fairgrounds as a year-round destination for livestock events. As a result, it is necessary for the Missouri State Fair to take a very practical approach to organic waste management.

The fair's approach to managing organic waste is focused on composting and re-purposing the materials. The first important step was taken in 1993 when the Missouri Department of Natural Resources partnered with the fair to construct a concrete composting pad by providing both technical advice and financial assistance through the Solid Waste Management Program Financial Assistance Program. Prior to that time, the bulk of animal waste and bedding materials were hauled off premises and disposed of on local farms.

The fairgrounds purchased a grinder which would process the material into a form that would enhance the composting process, enabling it to be used in gardening and landscaping. This material was used on the fairgrounds and shared with other state and local agencies. Over the years, residents of Sedalia and surrounding communities have also taken notice of the nutrient rich compost and have asked permission to take small loads of the ground compost for use in their own yards and gardens. As a result of properly composting animal waste and bedding material, the fair was able to provide cost savings to the state through reduced hauling and disposal fees and also received the unexpected public relations benefit of providing a small public service without additional cost to the fair.



State Fair Composting Area

The Missouri State Fair has continued to pursue opportunities to reduce the cost to the state while maintaining its current high standards for recycling organic waste. Grinding compost is time intensive and the cost of equipment maintenance is significant. After numerous efforts, the fair is pleased to announce that a company has been identified that will both haul the organic waste from the fairgrounds and process it for use as fertilizer. In FY07, the Missouri State Fair will have the opportunity to re-purpose the manure and bedding removed from the fairgrounds in an environmentally sound manner while further reducing the state's cost for organic waste management.

State Agency Recycling Efforts Avoid Cost of Waste Disposal

The efforts of agencies statewide resulted in a combined total of **8,402** tons (see chart on p. 9) of materials recycled in FY06. If this amount of material had been sent to landfills it is estimated the State of Missouri would have paid at least **\$303,900** in waste disposal costs. It is possible to calculate this cost avoidance based on the average tipping fee charged to waste haulers in Missouri. Tipping fees are paid by waste haulers for each ton of trash dumped in Missouri's landfills. The average tipping fee in Missouri in FY06 was \$36.17 per ton. The tipping fee is only one cost of doing business as a waste hauler. In addition to the tipping fee, a waste hauler includes labor and transportation costs in the actual amount charged to its customers. Therefore, utilizing the average tipping fee to calculate cost avoidance represents a conservative estimate. The actual cost avoidance realized by state agencies in FY06 would likely be significantly higher.

Self-Service Recycling Stations

To recognize the 2005 Missouri/America Recycles Day the Missouri State Recycling Program implemented a new self-service recycling program. Two services — rechargeable battery and inkjet cartridge recycling — were combined to create a recycling station where employees are able to conveniently recycle rechargeable batteries and inkjet cartridges at the same location.

Boxes for collecting rechargeable batteries and sit on top of a small table where employees may deposit these items for recycling. Just below the box is a roll of postage paid inkjet cartridge mailers that is dispensed like a roll of paper towels. Employees are able to tear off mailers and send inkjet cartridges in the US Mail (mailers are approved for placement in mailboxes).

The self-service recycling station offers the following advantages:

- Convenient for employees
- Manageable for recycling staff
- Several items can be recycled in one place
- Doesn't take up much space
- Items from home or work can be recycled
- No cost for the recycling services



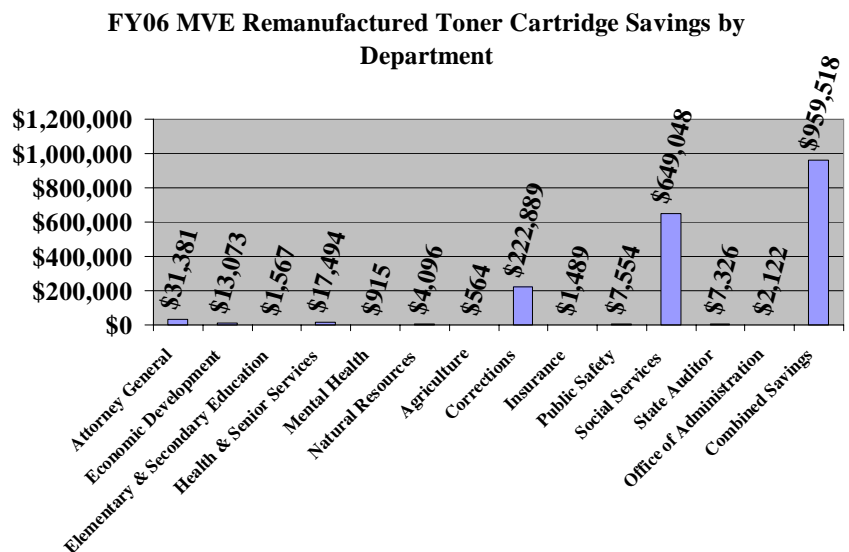
By the end of FY06 there were 14 recycling stations distributed in the following state office buildings in Jefferson City — State Capitol, DNR Lab, Feed/Seed Lab, Harry S Truman, Jefferson, JCK State Information Center, Lewis & Clark, Department of Mental Health, and Department of Natural Resources offices located on E. Elm St.

Remanufactured Toner Cartridges: State Agency Savings

For over 10 years Missouri Vocational Enterprises has offered a toner cartridge remanufacturing service for state agencies. This service has provided state agencies an opportunity to realize significant savings and reduce waste by reusing toner cartridges.

The chart to the right illustrates combined agency savings in FY06 of nearly one million dollars. Savings is estimated by calculating the difference in price between MVE toner cartridges and non-recycled toner cartridges available from the office supplies contract.

From FY04 - FY06 state agencies saved over \$2.4 million dollars by utilizing MVE's toner cartridge remanufacturing service.



FY06 Overview: Recycled Content Procurement


Recycling Program Guidelines for Buying Recycled

The State Recycling Program works with agencies to increase procurement of products containing recycled content. This is commonly referred to as “closing the loop”. Recycling can only be successful if products produced from recyclable materials are then purchased. The State Recycling Program has adopted the Environmental Protection Agency’s (EPA) “**Comprehensive Procurement Guidelines (CPG)**” for recycled content products as a roadmap for the State of Missouri to continue working towards “closing the loop”.

Evaluation Criteria for Products Listed Under CPG:

- Availability of product
- Impact of procurement on the solid waste stream
- Economic and technological feasibility of producing the product
- Other uses of the recovered materials used to produce the product

There are 8 categories designated in the CPG. Product categories and individual items in these categories are listed below







Products identified by the recycling symbol  also appear in the Missouri Recycled Products Directory published by the Environmental Improvement and Resources Authority’s Market Development Program. This publication is a good resource for locating recycled products manufactured and distributed in Missouri. Additional information about this directory may be found in the “Recycling Resources” section on p. 20 of this report.

Product Fact Sheets may be found for each of these categories on the internet at the following address:




<http://www.epa.gov/epaoswer/non-hw/procure/factshts.htm>

Comprehensive Procurement Guidelines: Recycled Product Categories





1. Construction Products

-  **Building Insulation**
 - Carpet (polyester)
 - Carpet Cushion
 - Laminated Paperboard
-  **Cement & Concrete Containing**
 - Coal fly ash
 - Furnace slag
 - Ground granulated blast
 - Cenospheres
 - Silica fume
- Consolidated & Reprocessed Latex Paint
- Floor Tiles
- Flowable Fill
- Modular Threshold Ramps
- Nonpressure Pipe
-  **Patio Blocks**
 - Railroad Grade Crossing Surfaces
-  **Roofing Materials**
-  **Shower & Restroom Dividers/Partitions**
-  **Structural Fiberboard**




2. Landscaping Products

-  **Compost Made from Yard Trimmings or Food Waste**
 - Garden & Soaker Hoses
-  **Hydraulic Mulch**
 - Lawn & Garden Edging
-  **Plastic Lumber Landscaping Timbers & Posts**

3. Park & Recreation Products

-  **Park Benches & Picnic Tables**
-  **Plastic Fencing**
-  **Playground Equipment**
-  **Playground Surfaces**
 - Running Tracks

4. Paper Products

-  **Commercial/Industrial Sanitary Tissue (paper towels & toilet paper)**
 - Miscellaneous Papers
 - Newsprint
-  **Paperboard & Packaging Products**
-  **Printing & Writing Papers**

5. Nonpaper Office Products

-  **Binders, Clipboards, File Folders, Clip Portfolios, & Presentation Folders**
-  **Office Furniture**
-  **Office Recycling Containers**
-  **Office Waste Receptacles**
 - Plastic Desktop Accessories
 - Plastic Envelopes
 - Plastic Trashbags
-  **Printer Ribbons**
-  **Toner Cartridges**




6. Vehicular Products

- Engine Coolants
- Rebuilt Vehicular Parts
- Re-Refined Lubricating Oils
- Retread Tires

7. Transportation Products

- Channelizers
- Delineators
- Flexible Delineators
- Parking Stops
- Traffic Barricades
- Traffic Cones

8. Miscellaneous Products

-  **Awards & Plaques**
 - Bike Racks
 - Blasting Grit
 - Industrial Drums
 - Manual-Grade Strapping
-  **Mats**
-  **Pallets**
 - Signage
 - Sorbents






State Agencies Close the Loop with Paper Procurement

Paper is the most common recycled product purchased by state agencies. In 1990, RSMo 34.032 established attainment goals for state agencies to purchase certain percentages of products made from post-consumer recovered materials. One goal was that 60% of paper products purchased by the State of Missouri contain post-consumer materials by the year 2000. This goal has been met in three out of the four past fiscal years. In FY06, 62% of paper purchased by state agencies contained recycled-content fibers.

FY06 Purchases of Recycled Paper Compared to Virgin Paper						
Product Category	Recycled Paper Purchases	Total Category Purchases (Recycled + Virgin)	Recycled Paper Purchases as a % of Total Purchases in Product Category	Recycled Paper Purchases as a % of Total Purchases in Product Category		
	FY06	FY06	FY06	FY05	FY04	FY03
Fine Paper Products (office, copy, fax)	\$1,298,719	\$2,278,318	57%	22%	70%	60%
Course Paper Products (napkins, towels, tissues)	\$1,127,979	\$1,172,850	96%	83%	94%	90%
Forms (continuous & snap out)	\$196,464	\$857,817	23%	43%	90%	84%
Envelopes (Plain or Printed)	\$765,983	\$880,346	87%	88%	97%	98%
Printing by contractors (40% of total charge)	\$677,204	\$1,353,541	50%	35%	61%	50%
Overall Totals	\$4,066,349	\$6,542,872	62%	41%	74%	67%

Environmental Benefits of Buying Recycled Paper

The State of MO spent \$1,298,719 on recycled "Fine Paper Products" in FY06. A majority of this paper is printer/copier paper made with 30% post-consumer recycled paper. Purchasing this type of recycled paper versus virgin paper translates into the following estimated savings:

 8,610 trees
 2,511,337 gallons of water
 10.5 tons of air pollution
 1,470,926 kw/hours of electricity
 5.02 billion Btu—enough energy to power 502 homes for a year!

FY06 Department Reports for Recycled Content Product Procurement

Non-Paper Recycled Content Procurement	Attorney General	Auditor's Office	Treasurer's Office	Agriculture	Conservation	Corrections	Economic Development	Elementary & Secondary Education	Health & Senior Services	Higher Education	Insurance	Mental Health	Natural Resources	Office of Administration	Public Safety	Revenue	Social Services	Transportation	TOTALS
Ammunition-Lead & Brass																			\$0
Antifreeze																		\$2,340	\$2,340
Asphalt Products						\$20,075												\$22,500,000	\$22,520,075
Batteries-Rechargeable						\$8,280							\$28		\$1,827			\$15,000	\$25,135
Building-Construction						\$67,196													\$67,196
Computer-Copy Supplies																		\$10,300	\$10,300
Cardboard Boxes						\$1,422									\$424				\$194,339
Glass Beads																		\$10,000,000	\$10,000,000
Ink & Toner Cartridges	\$13,985	\$3,484		\$417		\$140,103	\$8,016	\$710	\$11,957		\$1,426	\$490	\$2,018	\$1,403	\$7,090		\$463,403	\$1,600	\$656,102
Janitorial Supplies					\$2,000	\$22,426		\$12,708				\$4,249			\$5,964				\$529,638
Lumber, Plastic						\$53,443													\$53,443
Metal Products					\$16,061														\$1,468,061
Office Supplies			\$5,790	\$2,334		\$28,670		\$4,077		\$467	\$4,877	\$12,473	\$12,494		\$11,240	\$4,500		\$175,000	\$486,952
Paint						\$6,917							\$8,771					\$5,600,000	\$5,615,688
Pallets / Skids																			\$0
Promotional Items																			\$0
Remanufactured Furniture												\$5,366							\$154,347
Re-refined Oil																		\$6,500	\$6,500
Signs																		\$3,000,000	\$3,000,000
Tires, Retread																		\$85,000	\$85,000
Vehicle Maintenance Supplies						\$11,864									\$55				\$11,919
Total Dollars Spent on Recycled-Content Products in FY06																			\$44,887,035

Note on Totals: In addition to agency reported figures, the following procurement totals reported by MVE for all state agencies that purchased these items have been included.
Cardboard Boxes=\$192,493; Janitorial Supplies(polybags)=\$482,291; Metal Products=\$1,452,000; Remanufactured Furniture=\$148,981. For Office Supplies, \$225,030 was added to the total for all agencies utilizing the statewide contract from March - June, 2006. See p. 20 for additional information on recycled-content percentages for MVE products.

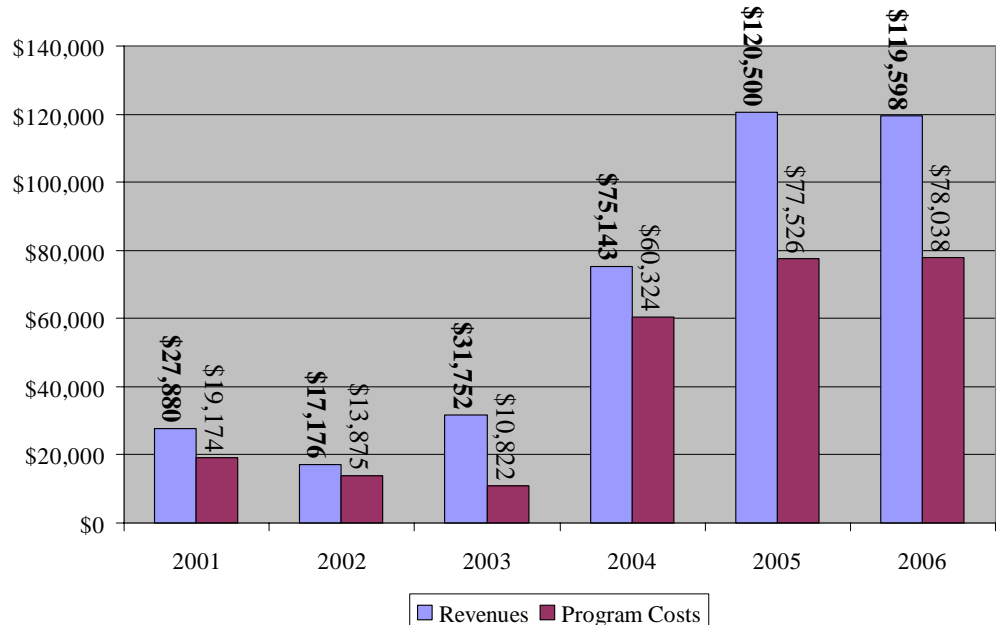
II. FY06 Overview: Missouri's State Recycling Fund

Missouri's State Recycling Fund was established by RSMo 34.032 which states that "Proceeds from the sale of recycled materials may be used to offset costs of the recycling program."

The chart to the right illustrates the significant financial growth due to state employee recycling efforts over the past five years. Increased revenue has allowed the Missouri State Recycling Program (MSRP) to not only cover the costs (consumables and maintenance) of established programs, but also to purchase equipment for new recycling initiatives.

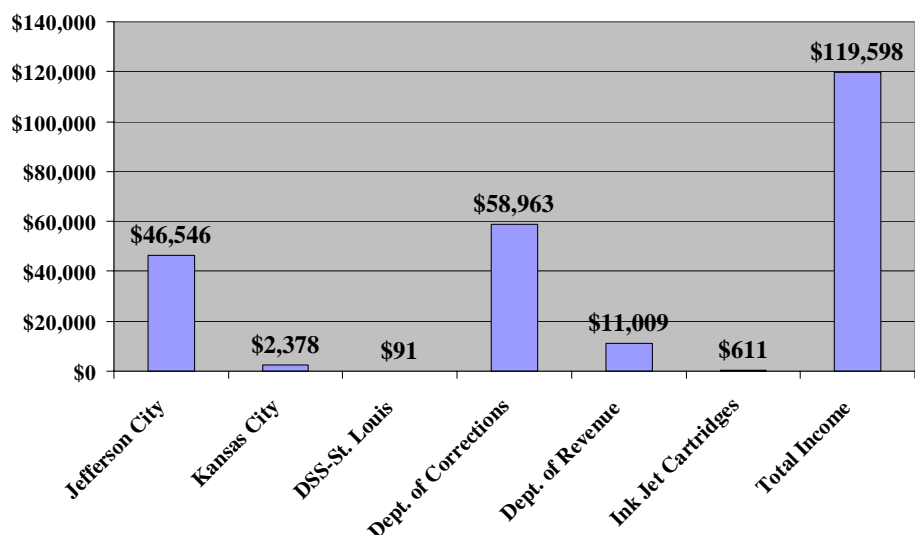
In FY06, the MSRP distributed over 3000 plastic bags to state agencies. A majority of these were used to collect aluminum cans with a smaller percentage used for mixed office paper and plastic bottles. In addition, over 400 containers for collection of mixed office paper and twenty-eight containers for aluminum cans were provided to state agencies in FY06. Other significant purchases made with monies from the State Recycling Fund included containers for the Department of Revenue's paper recycling program, cardboard containers for several office buildings in the Jefferson City area, and a commercial scale can crusher for MO Eastern Correctional Center.

Recycling Fund Summary: Fiscal Year 2001 - 2006



The top three sources of revenue in FY06 were the Department of Corrections (49%), Jefferson City recycling contract (39%), and Department of Revenue (9%). (see chart to right). The Department of Corrections (DOC) spends a significant amount of recycling funds on consumable products such as plastic bags and baling wire for securing bales of recyclable materials. This is due to the high volume of materials that DOC generates and recycles.

FY06 Recycling Fund: Sources of Revenue



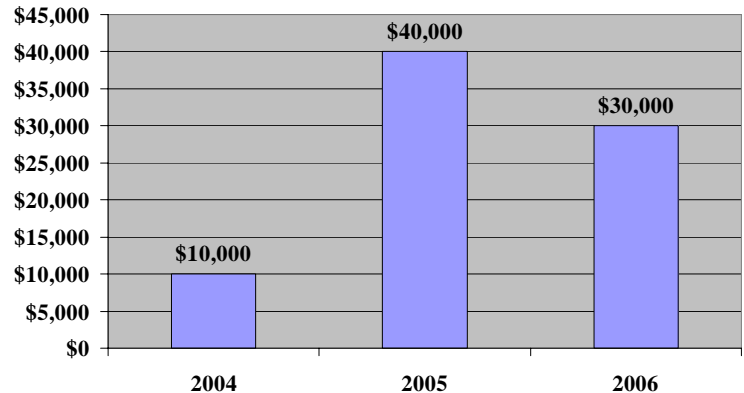
Missouri's State Recycling Fund (cont.)

Contributions to the Heating Assistance Program (Utilicare)

Excess revenues from the sale of recyclable materials are transferred to the Heating Assistance Program managed by the Department of Social Services pursuant to RSMo 34.032. The Heating Assistance Program (HAP) - also known as Utilicare - provides financial assistance to low-income Missourians for heating their homes during winter months. The MSRP has transferred a total of **\$165,000** to the HAP since 1995.

As a result of state employee recycling efforts, the MSRP was able to make a **\$30,000** contribution to the HAP in FY06. The \$30,000 transferred to the HAP in FY06 will help approximately 150 households in Missouri to pay their heating bills.

Fiscal Year 2003 - 2005 Recycling Monies Transferred to the Heating Assistance Program



III. State Recycling Program Goals

FY06 Goals

Goal: Increase number of locations where state agencies and employees have convenient access to rechargeable battery and inkjet cartridge recycling services by 25.

Result: Fifteen self-service recycling stations (see p. 14) allowing access to rechargeable battery and inkjet cartridge recycling were placed in eight buildings in FY06. Four additional locations registered for each of these services separately (i.e., did not request a recycling station) which resulted in a total of 19 locations where employees had access to rechargeable battery and inkjet cartridge recycling.



Goal: Assist state departments in determining the most practical and efficient methods to meet the needs of state agencies for records destruction (shredding).

Result: The Missouri State Recycling Program (MSRP) assisted the Department of Labor and Industrial Relation's Division of Employment Security with improving document destruction practices. A more efficient, less expensive method for destroying confidential documents was established in FY06. (see p. 12)

Goal: Increase availability of recycled-content products on statewide contracts.

Result: The MSRP did not address this goal in FY06 due to time constraints and it was determined this goal will require additional research.

FY07 Goals

-  Determine a practical methodology for collecting data for state agencies' recycled-content procurement practices. Publish guidelines for gathering procurement data for state agencies to use when gathering information for the FY07 Annual Recycling Questionnaire (Fall, 2007).
-  Establish a recycling services contract for state agencies in the St. Louis area to recycle common office waste products such as paper and cardboard. Specific goals of the contract — no cost to state agencies, payment for recyclable materials, and at a minimum all buildings owned by the state and managed by the Office of Administration will be serviced by the recycling vendor.

IV. Recycling Resources

Missouri Department of Natural Resources Solid Waste Management Program

Internet: <http://www.dnr.mo.gov/env/swmp/index.html>

Email: swmp@dnr.mo.gov

Phone: **800-361-4827** or **573-751-5401**

The Solid Waste Management Program (SWMP) works with citizens, businesses, industry, and government to continue increasing material reuse and recycling. The SWMP web page is an excellent resource for information dealing with all aspects of solid waste management in Missouri.

Office of Administration Division of Purchasing & Materials Management Missouri State Recycling Program

Internet: <http://www.oa.mo.gov/purch/recypro.html>

Email: recycling@oa.mo.gov

Phone: **573-751-3384** or **573-751-2387**

The Missouri State Recycling Program (MSRP) works with state agencies to increase purchases of recycled content products, reduce their waste stream and increase collection of materials for recycling. The MSRP web page is a good resource for state contracts that offer recycled content products as well as recycling services.

Missouri Department of Natural Resources Environmental Improvement Energy Resources Authority / Market Development Program

Internet: <http://www.dnr.mo.gov/eiera/mo-market-dev-program.htm>

Email: eiera@dnr.mo.gov

Phone: **573-751-4919**

The **Missouri Recycled Products Directory** is published by the Market Development Program. An excellent resource for finding Missouri based businesses that manufacture or distribute recycled-content products. The directory is available online at <http://www.dnr.mo.gov/eiera/product-directory2006.pdf>

Missouri Department of Corrections Missouri Vocational Enterprises (MVE)

Internet: <http://www.doc.missouri.gov/mve>

Phone: **800-392-8486** or **573-751-6663**

The Department of Corrections vocational training program offers the following products and services that meet “buy recycled” criteria. MVE products and services are only available to state agencies and other tax-supported entities.

MVE Recycling/Remanufacturing/ Refurbishing Services

- Tire Recycling Service
573-635-3825
- Toner Cartridge Refill Service
573-751-3224 ext. 1260
- Office Panel (cubicle) Refurbishing Service
573-751-6663 or **800-392-8486**

MVE Recycled-Content Products

- Cardboard boxes: 60% post-consumer content
- Plastic bags: 30% recycled material
- Metal products: 25–35% post-consumer content
- Toilet paper: 100% recycled material
- Envelopes: 30% post-consumer content